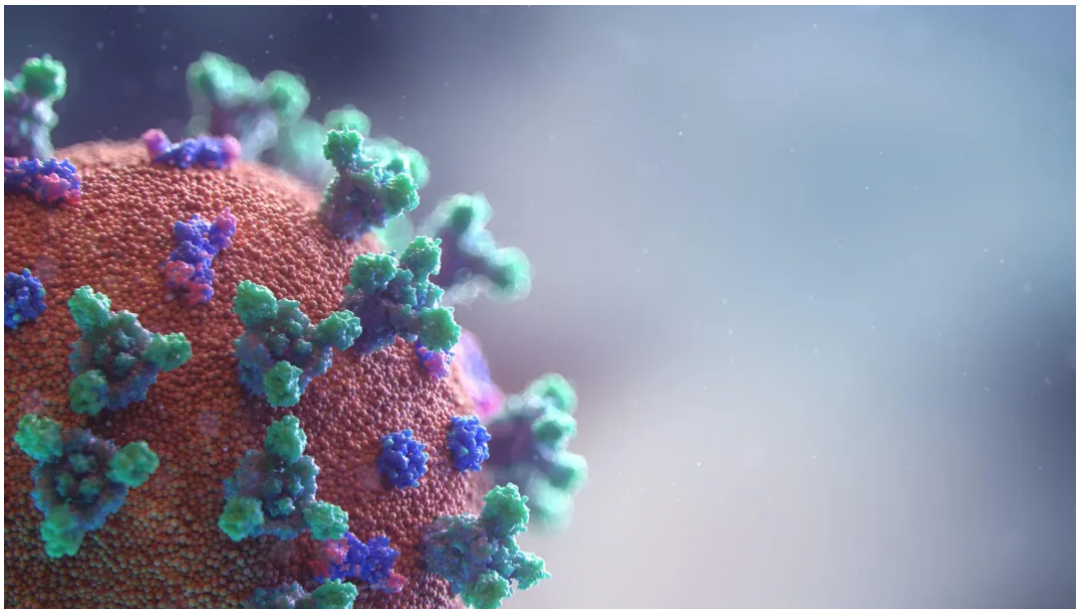
Debunking COVID-19 myths and misinformation

As the COVID-19 evolves, so should our knowledge

By **Peak Web** - October 3, 2023



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By: Michelle Young, Opinions Editor

"The COVID-19 pandemic is over and we are 'post-pandemic'"

There have been multiple declarations that the pandemic is "over" — perhaps the most well-known was President Joe Biden's declaration in 2022. When the World Health Organization (WHO) declared COVID-19 to no longer be a global emergency, many misconstrued this to mean the pandemic is "over." However, what was largely ignored was WHO then explaining COVID-19 continues to be a global threat, continues to kill and disable millions, and variants are still emerging. They specifically warned that "the worst thing any country could do now is to use this news as a reason to let down its guard, to dismantle the systems it has built, or to send the message to its people that #COVID19 is nothing to worry about."

COVID-19 never left. In BC alone, *CBC* reported that 2022 was the deadliest year of the pandemic, compared to previous years. Over 2,000 people died in 2022,

compared to 1,500 in 2021. People in BC continue to get sick and reinfected with COVID-19, however "official" case counts are underreported due to a lack of widespread testing.

What can be tracked, however, shows COVID-19 is still circulating at high levels. Individual reports, such as those made by COVID-19 Resources Canada — an organization made up of professors and researchers — compile data based on wastewater, hospitalizations, and deaths to project a more accurate picture of COVID-19 cases. These are also shown relative to the lowest points of the pandemic in Canada. Currently, they estimate one out of 13 people in BC are infected.

BC in particular has had slow and murky data collection under the guise of privacy, as reported by *CBC*, *The Tyee,* and *The Vancouver Sun*. Journalists have complained that health officials "won't clarify issues" and "send reporters to publicly available sources like the BCCDC website." This month, *CBC* also said COVID-19 outbreaks are not being reported to the public, and even hospital staff aren't fully aware of these outbreaks. According to the Minister of Health, up to "15,000 healthcare workers are calling in sick on average, compared to 9,000 in pre-pandemic times." Pandemics are classified as a "widespread growth" of disease. That's still the case for COVID-19.

"COVID-19 has mutated to become more mild and seasonal, like 'the flu'"

COVID-19 continues to produce far more mortality rates — around five times more — than the flu, and circulates all year round. It's in the name — SARS-CoV-2 stands for "severe acute respiratory syndrome coronavirus 2." In fact, the Government of Canada classifies the virus as a Risk Group 3 human pathogen, which "are associated with serious or lethal human or animal diseases." Tuberculosis is also in this category. Risk Groups range from one to four, with four being the highest, which includes pathogens like Ebola and smallpox.

The Michigan Technological University notes that the management of these organisms in Risk Group 3 include "controlled access to laboratory" and "protective clothing," including "respiratory protection as needed." You can even find a video of how virologists protect themselves from COVID-19 in the lab, as

posted by the Australasian Virology Society.

While acute infections (the phase when you are actively sick) may not produce severe illness, long term effects, otherwise known as Long COVID, remain a large concern. *Nature*, *Scientific American*, and the National Institutes of Health have all found substantial evidence that COVID-19 damages the immune and nervous systems, lungs, heart, organs, and basically any part of the body. The more times you get sick, the more likely these adverse effects are. Long COVID has few treatment options available. These health effects can appear months after you were infected. Viruses are never guaranteed to mutate to become more "mild," and can actually become more severe.

The flu has a clear seasonal pattern: cases rise in the fall and winter, but are extremely low in the summer and spring. While COVID-19 does have rising cases at similar times, the baseline level of COVID-19 remains high in the summer and spring. We know this thanks to wastewater data, "which comes from concentrations of viruses, like flu and COVID-19, in sewage." This data has shown that "the flu" isn't circulating at all during warmer months, but COVID-19 continues to increase. So, if you were sick this summer with a "cold" or "flu," it was more likely COVID-19, even if you tested negative. More on that next.

"I tested negative, therefore I do not have COVID-19"

It's unfortunate, but COVID-19 tests are quite finicky when it comes to new variants, and often produce false negatives. You may need to test multiple times for an accurate result, as some people don't test positive until later in their infection. So if you're sick, it's important to stay home when possible and wear a mask regardless of a negative test.

"Only those who are vulnerable or unvaccinated need to worry about COVID-19"

COVID-19 can adversely affect the body in multiple ways, regardless of vaccination status, how severe your initial infection felt, or risk factors.

While those who are vaccinated and have no other risk factors for COVID-19 are less likely to become hospitalized for the illness or experience a severe case of

COVID-19 at the time of infection, vaccinations or general health cannot protect against Long COVID. *Nature* reports Long COVID is estimated to affect at least 10% of people with COVID-19, but these estimates are acknowledged as being conservative. While COVID-19 vaccinations may have rare side effects, like any other vaccine or medication, Long COVID has been an issue since before vaccinations became widely available — the idea that vaccines cause Long COVID is null. *The Lancet* had collected data on Long COVID as early as September 2020. You are more likely to get adverse side effects from COVID-19 itself than the vaccine.

"COVID-19 is only transmitted through droplet transmission"

COVID-19 is airborne. COVID-19 can also be transmitted through large droplets — such as sneezes or saliva — but its primary mode of transmission is through smaller aerosols. This includes breathing in and out, with or without speaking. In fact, COVID-19 may be more likely to transmit through the particles exhaled through the nose than the mouth, which is why it's important to have your nose covered when wearing a mask.

"COVID-19 cannot transmit outdoors"

COVID-19 is *less likely* to transmit outside, but still entirely possible. This is especially the case for crowded outdoor events, like concerts, festivals, or night markets. If you can feel someone's breath, you can get COVID-19. Conversely, the wind can also blow someone's infectious air into your face. Studies show that infectious COVID-19 particles can stay in outdoor air for over an hour.

"I'm vaccinated, so I can't transmit or contract COVID-19"

COVID-19 can be transmitted regardless of vaccination status. While vaccines lessen your chance of severe acute infection, they are by no means enough to stop a transmission or infection. *Scientific American* reported that while vaccines were previously an effective reduction of both transmission and infection, with new variants and outdated shots, this is no longer the case.

"After two doses, my vaccines are up-to-date"

Immunity wanes over time, especially with evolving variants, meaning you're not as immune as you were to COVID-19 when vaccines first got rolled out.

"I was already infected with COVID-19, therefore I am immune"

You are also not immune to COVID-19 after infection. *Global News* reported "if an individual does develop antibodies as a result of an Omicron infection, the levels of immunity provided by that illness are quite low, which leaves them vulnerable to future or repeat infections." Further, studies have shown any natural immunity weakens "faster than immunity provided by COVID-19 vaccination." This is also why one or two infections and subsequent recoveries don't guarantee you'll be free of long-term effects after future infections. That's also why it's so important to keep up-to-date with recent vaccines. BC recommends that everyone gets an updated dose of COVID-19 this fall, with the vaccination program beginning October 10.

"I feel fine, therefore I cannot transmit COVID-19"

COVID-19 can be transmitted both asymptomatically and pre-symptomatically. Asymptomatic means you may never get symptoms, but have been infected with COVID-19 and can transmit it without knowing. At least half of COVID-19 cases could be transmitted asymptomatically, according to *JAMA Network*. Pre-symptomatic transmission means you have not yet shown symptoms of COVID-19, but you currently have the virus. You are infectious during this time. Both these modes of transmission showcase why masks remain an important preventive measure.

"People are getting sick due to 'immunity debt'"

"Immunity debt" — the idea that our immune systems were "underworked" due to the prevalence of masks and distancing, and therefore made more vulnerable, has been entirely debunked. The paper the theory is based on suffered from logical fallacies, as reported by McGill. There was no evidence for the theory to begin with, and it's been dubbed as misinformation by multiple immunologists. It is not an established concept in immunology, and you do not need continuous exposure to viruses to "work out" your immune system — it isn't a muscle. *Global*

News reported that "there is absolutely no mechanism by which your immunity weakens on its own."

The fact is, COVID-19 can harm your immune system. This is well-established. If you want to keep your immune system as healthy as possible, it's in your best interest to avoid getting COVID-19 as much as possible, rather than be infected with it.

"But Dr. Bonnie Henry said . . ."

I hate to break it to you, but Henry cannot — and should not — be your only source for COVID-19 information. It's quite unfortunate that the person in charge of BC's pandemic response has been reported by *Capital Daily* to knowingly lie about transmission in schools, downplay COVID-19 risks, and deflect questions for specific COVID-19 guidance. Many of her statements (such as those around "high immunity") have already been debunked (even by her own study!) or lack evidence. According to her policies, the public no longer needs to wear a mask in indoor public spaces. However, given the transmissibility, rising cases, and long-term concerns, it's in everyone's best interest to wear one.

Our health officials are playing politics and are not informing the public of this well-established information. Similarly, not all doctors are up-to-date on their COVID-19 information. This is a failure of public health, but there are steps you can take to stay informed.

If you want to stay updated on COVID-19 information, I would recommend looking deeper than public health statements. Look at studies and reports by *Nature*, *Scientific American*, *The Lancet*, National Institute of Health, *JAMA Network* and more. COVID-19 Resources Canada also hosts free drop-in information sessions for the public to ask questions. Cross-check your information and avoid relying on single studies. Lastly, listen to vulnerable folks — especially those with Long COVID. They are the ones most affected by this pandemic, and have been informing and advocating for the community more than anyone.

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